

# example

*test*

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## R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

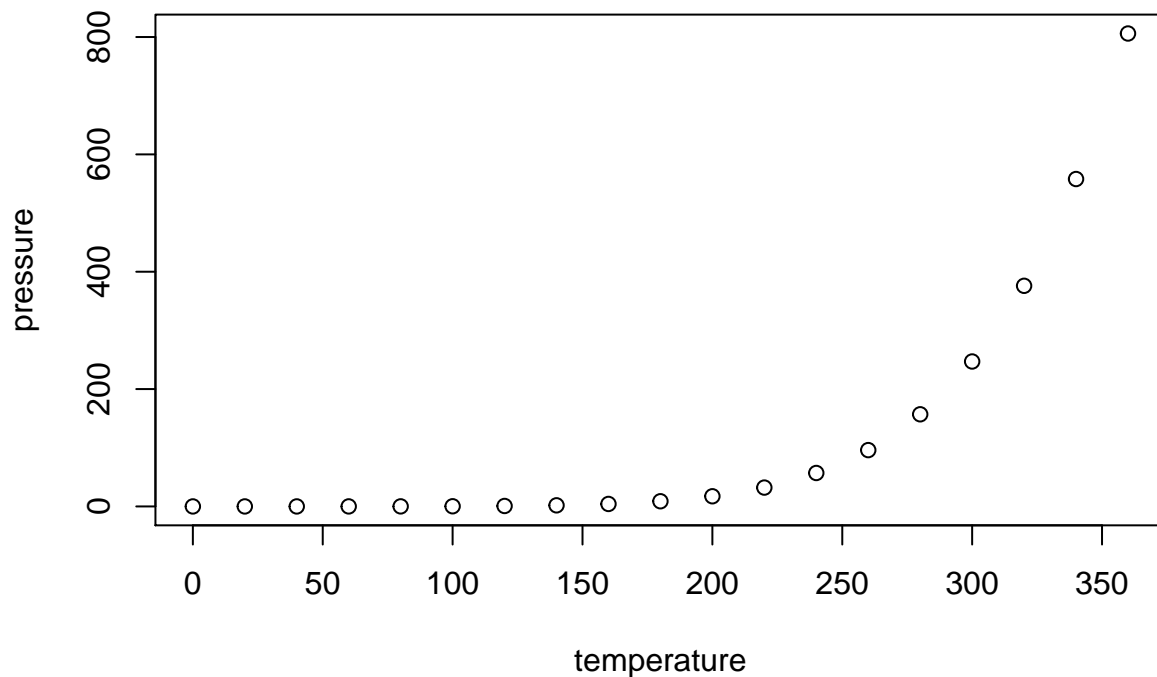
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

```
##      speed      dist
##  Min.   : 4.0    Min.   :  2.00
##  1st Qu.:12.0    1st Qu.: 26.00
##  Median :15.0    Median : 36.00
##  Mean   :15.4    Mean   : 42.98
##  3rd Qu.:19.0    3rd Qu.: 56.00
##  Max.   :25.0    Max.   :120.00
```

## Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

```
x1 <- rnorm(100)
x1
```

```
## [1] -0.05742547  0.18885291 -0.55952627  0.74303341  1.82073733
## [6]  1.70641249  0.38189044 -1.59973610 -0.99687487  0.20312743
## [11] -1.12636440 -0.03893054 -2.00456523  0.23820328  1.74466716
## [16]  0.71427626  0.09630529 -1.28221805 -0.16599641 -0.10580947
## [21]  0.29870477 -2.17859168 -1.33594160 -1.25485003 -0.53820544
## [26] -0.27564771 -0.92460672 -2.01493696 -1.09076903 -0.35596165
## [31]  1.27769669  0.54627112 -0.08405403  0.61372660  3.07738076
## [36]  1.31027581  1.67301231  1.42272463  1.09254341  1.02846613
## [41]  0.67901195 -0.55113942 -1.55285023 -0.38586158  1.47675163
## [46]  1.43930076  0.29268453 -0.57153765  0.35494092  0.33990291
## [51] -0.32676026  0.15244811  0.29584299 -1.59700103 -2.35826681
## [56] -0.23599661  1.24384954  0.22678821 -0.00434745  0.38858619
## [61] -0.24648402  1.10274156 -0.27642747 -0.89814627 -0.85711789
## [66]  0.78247153  0.36276808  0.61051804  0.51862881  1.08700515
## [71] -0.46114950 -2.39212971 -0.14613232  0.22028855  0.22872532
## [76] -1.01176310 -0.48150627  1.37926305  1.08804991  0.84892364
## [81] -0.12265978 -1.70172287 -0.08176608 -1.49668083 -2.36678583
## [86]  0.98905791  0.97917194  1.12549585  1.88596359  0.12792173
## [91] -0.18446303 -0.54211857 -2.01549971  1.43920461 -0.53141422
## [96] -1.15287065  0.40743647  0.45008547  0.70585700  1.26386531
```

$$S_t = \mu dt + \sigma dW_t$$

$$S_t = \mu dt + \sigma dW_t \tag{1}$$

- test 1
- test 2

## Section 1

### Subsection 2